

PROPOSED HABITAT PROTECTION CLOSURE

**FORT FUNSTON
GOLDEN GATE NATIONAL RECREATION AREA**

328

NATIONAL PARK SERVICE


GOLDEN GATE NATIONAL RECREATION AREA

CORRECTION TO NOTICE OF PROPOSED YEAR-ROUND CLOSURE AT
FORT FUNSTON
AND REQUEST FOR COMMENTS

CORRECTION: Public comments on this notice must be received by September 18, 2000.

Dated: July 17, 2000.

A handwritten signature in black ink, appearing to read "Brian O'Neill", is written over a horizontal line.

 Brian O'Neill
Superintendent, GGNRA

NATIONAL PARK SERVICE

GOLDEN GATE NATIONAL RECREATION AREA

NOTICE OF PROPOSED YEAR-ROUND CLOSURE AT FORT FUNSTON
AND REQUEST FOR COMMENTS

DATE: Friday, July 14, 2000

ACTION: Notice and request for comments.

SUMMARY: In accordance with the resource protection mandate of the National Park Service (NPS), the Golden Gate National Recreation Area, NPS, is announcing its proposal to close year-round approximately 12 acres of Fort Funston to off-trail recreational use by the public. The closure is located in the northwest portion of Fort Funston. This closure is necessary to protect habitat for the California threatened bank swallows (*Riparia riparia*), enhance significant native plant communities, improve public safety and reduce human-induced impacts to the coastal bluffs and dunes, a significant geological feature. NPS invites comments on this proposed year-round closure.

BACKGROUND: Section 1.5 of Title 36 of the Code of Federal Regulations authorize the Superintendent to effect closures and public use permits within a national park unit when necessary for the maintenance of public health and safety, protection of environmental or scenic values, protection of natural or cultural resources, aid to scientific research, implementation of management responsibilities, equitable allocation and use of facilities, or the avoidance of conflict among visitor use activities. The proposed closure at Fort Funston is necessary to protect public safety, to protect environmental values and natural resources, and to implement management responsibilities. Because of a May 16, 2000, Federal District Court ordered preliminary injunction against the NPS, disallowing the closure until such time as appropriate public notice and opportunity for comment was provided, NPS is providing this notice and invites comments from the public on this proposed year-round closure.

REFERENCE: Public Law 92-589 of October 27, 1972, as amended, as codified in Title 16 United States Code Sections 460bb through 460bb-5. Title 16 United States Code Sections 1 and 1a-1. Title 36 Code of Federal Regulations Sections 1.5, 1.7, 2.1, and 2.15. *Ft. Funston Dog Walkers v. Babbitt*, No. C 00-00877 WHA, N.D. Cal., Preliminary Injunction, May 16, 2000.

COMMENTS: Public comments will be accepted for a period of 60 calendar days from the date of this notice. Therefore, public comments on this notice must be received by September 12, 2000. Public comments should be submitted to NPS as early as possible in order to assure their maximum consideration. Comments will be considered and this proposal may be modified accordingly, and the final decision of the National Park Service will be published in the Federal Register.

If individuals submitting comments request that their name and/or address be withheld from public disclosure, it will be honored to the extent allowable by law. Such requests must be stated prominently at the beginning of the comments. There also may be circumstances wherein the NPS will withhold a respondent's identity as allowable by law. As always, NPS will make available for public inspection all submissions from organizations or businesses and from persons identifying themselves as representatives or officials of organizations and businesses; and, anonymous comments may not be considered.

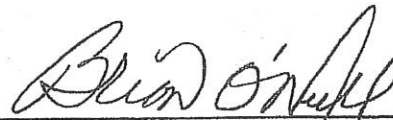
SEND COMMENTS TO: Superintendent, Golden Gate National Recreation Area, Bay and Franklin Streets, Building 201, Ft. Mason, San Francisco, 94123.

FURTHER INFORMATION: Detailed information concerning this proposal, including a map depicting the closure area and open park trails, is available at the following locations:

- Fort Funston Visitor Center and Ranger Office, ¼ mile south of John Muir Drive, on the west side of Hwy 35, Golden Gate National Recreation Area, National Park Service, San Francisco
- Pacific West Information Center, National Park Service, Building 201, Fort Mason, Bay and Franklin Streets, San Francisco
- San Francisco Public Library, Marina Branch, **The Marina Branch Library is closed for renovation. Please use other sites listed on this notice.**
- San Francisco Public Library, Sunset Branch, 1305 18th Avenue, San Francisco

CONTACT: For further information, contact Scalla Sheen, Office of Public Affairs, GGNRA at 415-561-4730.

Dated: July 14, 2000.



Brian O'Neill
Superintendent, GGNRA

I. INTRODUCTION

As part of the resource protection mission of the National Park Service (NPS), approximately 12-acres of Fort Funston is being closed year-round to off-trail recreational use by the public. This action will protect habitat for a nesting colony of California state-threatened bank swallows (*Riparia riparia*), a migratory bird species once more common along the California coast that has declined significantly due to habitat conversion and increased recreational use. This closure is also necessary to enhance significant native plant communities, improve public safety, and reduce human-induced impacts to the coastal bluffs and dunes, a significant geological feature.

Part of the Golden Gate National Recreation Area (GGNRA), Fort Funston spans approximately 230 acres along the coastal region of the northern San Francisco peninsula. It is located south of Ocean Beach and north of Pacifica, and is flanked to the east by both John Muir Drive and Skyline Boulevard, and to the west by the Pacific Ocean. The proposed year-round closure is located within the northern region of Fort Funston and is depicted on the attached map as "Project Area (Year-round closure)." It is defined to the west by the edge of the coastal bluffs; to the east by the Coastal Trail; to the north by protective fencing installed in the early 1990s for habitat protection; and to the south by a pre-existing "beach access" trail west of the Battery Davis "Y". There is currently fencing erected around the eastern and northern perimeters of the proposed year-round closure area. Additional fencing will be erected along the southern boundary, parallel to the "beach access" trail (see map). This fencing will be peeler post and wire mesh design, consistent with the existing fencing that was erected in February-April 2000.

The entire 12-acre project area will be closed year-round to visitor access. There is a portion of one designated trail located within the footprint of this closure. This trail, known as the "Spur trail" (see map), will be closed to visitor use because southern sections of this trail have become unusable due to increased sand deposition on the trail surface. This has compounded the establishment and use of unauthorized "social" trails in the northern section of the project area. Visitor use of and access to all "social" trails including "the Gap" (see map) within the project footprint will be prohibited by this closure.

II. HISTORY - Fort Funston

Prior to Fort Funston's purchase by the Army, the site supported a diversity of native dune vegetation communities. During the 1930s however, the Army built an extensive system of coastal defense batteries, drastically altering the dune topography east of the bluffs and, in the process, destroying much of the native plant communities that inhabited the dunes. Following construction, the Army planted iceplant (*Carpobrotus edulis*) in an attempt to stabilize the open sand around the batteries.

By the mid-1960s, extensive areas of Fort Funston were covered with invasive exotic plants such as iceplant and acacia. Some years after Fort Funston was closed as a military base, it was transferred to the National Park Service in 1972 to become part of the GGNRA. As a unit in the national park system, Fort Funston today is used extensively by beachcombers, walkers, hang gliders, paragliders and horseback riders, and other recreational users. Approximately three-quarters of a million visitors enjoy Fort Funston annually.

III. CLOSURE JUSTIFICATION

This closure is necessary to protect habitat for the California State-threatened bank swallows (*Riparia riparia*), enhance significant native plant communities, improve public safety and reduce human-induced impacts to the coastal bluffs and dunes, a significant geological feature. The National Park Service has authority to effect closures for these purposes pursuant to Section 1.5 of Title 36 of the Code of Federal Regulations. Specifically, Section 1.5 authorizes the Superintendent to effect closures and public use limits within a national park units when necessary for the maintenance of public health and safety, protection of environmental or scenic values, protection of natural or cultural resources, aid to scientific research, implementation of management responsibilities, equitable allocation and use of facilities, or the avoidance of conflict among visitor use activities. As discussed in detail below, the proposed closure at

Fort Funston is necessary to protect environmental values and natural resources, to protect public safety, and to implement management responsibilities.

A. The Threatened Bank Swallow

One of the many unique features of Fort Funston is that it supports one of the last two remaining coastal cliff-dwelling colonies in California for the bank swallow (*Riparia riparia*). Once more abundant throughout the state, their numbers have declined so dramatically that in 1989 the State of California listed the bank swallow as threatened under the California Endangered Species Act. The bank swallow is also a protected species under the Migratory Bird Treaty Act, and for nearly a century, the bank swallows have returned to Fort Funston each March or April to nest and rear their young along the steep bluff faces. NPS regulations, policies and guidelines mandate the protection and preservation of this unique species and its habitat.

Its preferred habitat—sheer sandy cliffs or banks—has been altered throughout its range by development, eliminated by river channel stabilization, and disrupted by increased recreational pressures. The Fort Funston colony is particularly unique in that it is one of only two remaining colonies in coastal bluffs in California, the other being at Año Nuevo State Park in San Mateo County. Bank swallow habitat at Año Nuevo remains closed to visitor access.

Mortality of bank swallows results from a number of causes including disease, parasites and predation. Destruction of nest sites, including collapsed burrows due to natural or human-caused sloughing of banks, appears to be the most significant direct cause of mortality (Recovery Plan, Bank Swallow (*Riparia riparia*), State of California Department of Fish and Game 1992). The Recovery Plan recommends a habitat preservation strategy through protection of lands known to support active colonies or with suitable habitat features for future colony establishment. It also acknowledges that isolated colonies, like Fort Funston, are at particularly high risk of extinction or severe population decline. Additionally, the State of California Historic and Current Status of the Bank Swallow in California report (1988) recommended that nesting colonies be protected from harassment and human disturbance.

The Fort Funston colony has been recorded since at least 1905. Records indicate that the colony fluctuated in size and location over time. A 1961 study of the Fort Funston colony documented a total of 84 burrows in 1954, 114 in 1955, 157 in 1956, and 196 in 1960. GGNRA staff counted at least 229 burrows in 1982 and more than 550 in 1989. In 1987 the California Department of Fish and Game documented 417 burrows at Fort Funston. Approximately 40 to 60 percent of burrows are actively used for nesting in a given year.

Between 1992 and 1995, NPS implemented other protection and restoration measures for the Fort Funston colony, including a year-round closure of approximately 23-acres in the northern most portion of Fort Funston to off-trail recreational use. The current proposed closure area lies directly south of this previous closure area. From 1954-56 and from 1989-97, the colony was located along the bluffs within the footprint of this previous closure. However the colony shifted during 1959 and 1960, and again since 1998, such that birds are now nesting within the current proposed closure area.

In 1993, GGNRA established an annual monitoring program to track the abundance and distribution of bank swallows at Fort Funston. Trained personnel conduct weekly surveys during nesting season (from mid-April through early August). From 1993 to 1996, burrow numbers were over 500 each year. The number declined dramatically to only 140 in 1998 and 148 in 1999 when the colony shifted to the current proposed closure area (then unprotected). This event coincided with the storms during the winter of 1997 that caused significant cliff retreat and slumping. In an attempt to protect the colony from recreational disturbance of nesting habitat, protective fencing was installed along the bluff top in 1998 with interpretive signs to encourage visitors to reduce impacts on the nesting colony. These efforts proved unsuccessful in preventing recreational disturbance to the colony. NPS observed increased erosion due to visitor use adjacent to the fenceline. Moreover, the rate of natural bluff erosion, approximately one foot per year, and the constant deposition and erosion of sand material caused the fence to collapse and fail within just a few months. Fence posts near the bluff face also provided advantages to swallow predators that perch on the posts with a view to the swallow nests.

A wide array of disturbances to the swallows at Fort Funston have been observed and recorded during monitoring, and/or photo-documented. While bank swallows are known to be quite tolerant to some disturbance, few colonies are subjected to the intense recreational pressure at Fort Funston. Documented disturbance events at Fort Funston include: cliff-climbing by people and dogs; rescue operations of people and dogs stuck on the cliff face; people and dogs on the bluff edge or in close proximity to active burrows; graffiti carving in the cliff face; aircraft and hang-glider over-flights; and discharge of fireworks within the colony. The potential impacts from such disturbances include: interruption of normal breeding activity, such as feeding of young; crushing of burrows near the top of the cliff face (nests can be located within a foot of the bluff top); casting shadows that may be perceived as predators; accelerating human-caused bluff erosion; and active sloughing and land-slides that may block or crush burrows and the young inside.

The NPS has determined that the designated trails (see map) at Fort Funston provide adequate access to the park area and that continued use of unauthorized "social" trails within the project footprint has adverse impacts on park resources, including the bank swallow.

The institution of the proposed 12-acre closure area, coupled with increased interpretive signs and strategically located protective barriers at the base of the bluffs will protect the bank swallow colony by preventing most of these disturbances. There will be no visitor access to the bluff edges above the nesting sites, thus preventing falls and rescues on the cliff face, as well as human-induced erosion, crushing of burrows, and casting of shadows. Visitor access up the bluffs from the beach into the closure area will be prohibited, thus avoiding human-induced erosion of the bluffs and habitat disturbance.

B. *Geology and Erosion*

The bluffs at Fort Funston provide one of the best continuous exposures of the last 2 million years or more of geologic history in California, covering the late Pliocene and Pleistocene eras. This exposure of the Merced Formation is unique within both the Golden Gate National Recreation Area and the region. It is a fragile, nonrenewable geologic resource. NPS regulations, policies and guidelines mandate preservation of such resources by preventing forces (other than natural erosion) that accelerate the loss or obscure the natural features of this resource.

Recreational use along the bluff top contributes to a different type of erosion than the natural processes of undercutting and slumping. Concentrated wave energy at the base of the bluffs naturally leads to bluff retreat typically occurring during winter season when the bank swallows that nest in the vertical bluff faces are absent. Natural weathering and erosion from rainfall runoff and wind contribute to loss of the bluff face. During spring and summer, when park users clamber around the bluff top, erosion occurs from the top to the bottom, compromising the bluff face. Slumps caused by heavy visitor traffic along the bluff top can induce sand slippage and may even wipe out burrows during nesting season. Geologist Clyde Warhaftig described areas of this unique sand bluff formation as crushable with the fingers and indicated, in 1989, that people climbing the cliff faces would induce additional erosion and that such activity should be prevented.

Additionally, erosion has been both documented and observed throughout the inland topography of the closure area. Continued heavy visitor use in this inland dune bluff area and associated human-caused erosion along unauthorized "social" trails is likely to further shorten the lifespan of the bluffs, and is an additional threat to the long-term existence and sustainability of suitable habitat for the Fort Funston bank swallow colony.

The proposed closure will preserve the unique bluffs by preventing destructive human activity around the bluff tops and permitting the inland dune features to recover from human-induced erosion.

C. *Conservation and Restoration of Dune Habitats*

Fort Funston is the largest of several significant remnants of the San Francisco dune complex – once the 4th largest dune system in the state that covered more than 36 square kilometers of San Francisco. More than 95% of the original dune system has been drastically altered by urbanization and development

(Powell, 1978). The flora inhabiting the dunes of San Francisco was quite diverse. Historical accounts documenting San Francisco's native dune species can be used to reconstruct the likely historic flora of Fort Funston. Recent surveys of Fort Funston confirm that its remnant flora is clearly allied with other dune localities documented in the 1958 Flora of San Francisco. NPS regulations, policies and guidelines mandate protection of this unique resource.

Removing iceplant and other invasive exotic plant species is one of the most important strategies for restoring dunes. At Fort Funston, iceplant dominates more than 65% of the dunes. The California Exotic Pest Plant Council rates iceplant on its "A" list, which includes those species that are the Most Invasive and Damaging Wildland Pest Plants. "Even when [natural] processes are protected, the very nature of dunes, which are prone to disturbance and characterized by openings in the vegetation, renders them constantly susceptible to the invasion of non-native species—especially in urban settings. For these reasons, restoration is an essential component of dune conservation in northern California." (Pickart and Sawyer 1998).

Dense iceplant cover also affects the diversity and abundance of native insects and other wildlife. In a study of sand-dwelling arthropod assemblages at Fort Funston, Morgan and Dahlsten compared diversity between iceplant-dominated plots and areas where native plants had been restored. They found that "overall arthropod abundance and diversity are significantly reduced in iceplant dominated areas compared to nearby restored areas. . . . If plant invasion and native plant restoration dramatically affect arthropod communities as our data indicate, they may also have wider reaching effects on the dune community as a whole. This research demonstrates the importance of native plant restoration for sand-dwelling arthropod communities" (Morgan and Dahlsten 1999).

In a report last year, the Director of the National Park Service wrote that "it is undisputed that without decisive, coordinated action the natural resources found within the National Park System will disappear as a result of invasive species spread" (Draft NPS Director's Natural Resource Initiative – Exotic Species Section, 1999). Emphasis on the need to address invasive exotic species issues and control was further stressed through *Executive Order 13112 on Invasive Species signed February 3, 1999*. "Sec. 2 (a) each Federal Agency whose actions may affect the status of invasive species shall ... (2) (i) prevent the introduction of invasive species; (ii) detect and respond rapidly to and control populations of such species in a cost-effective and environmentally sound manner; (iii) monitor invasive species populations accurately and reliably; (iv) provide for the restoration of native species and habitat conditions in ecosystems that are invaded... (vi) promote public education on invasive species and means to address them.."

Increasingly heavy off-trail use has contributed to the deterioration of native dune communities at Fort Funston. Native dune vegetation is adapted to a harsh environment characterized by abrading winds, desiccating soils, low nutrient conditions, and salt spray, but it is not adapted to heavy foot traffic. Only a few species (a few annual plants, coyote bush (*Baccharis pilularis*)) are able to survive repeated trampling. NPS has determined that the designated trails (see map) at Fort Funston provide adequate access to the park areas, including ingress and egress to the beach, and that continued use of unauthorized "social" trails within the project footprint has adverse impacts on the park resources, including the native dune vegetation.

Increasingly, heavy off-leash dog use has also led to the deterioration of native dune communities. When on a leash, the effects of dogs on vegetation and other resources is focused along a trail corridor already disturbed by other recreational activities. When dogs are off-leash, their impacts are spread throughout a larger area. Trampling of vegetation caused by roaming dogs weakens the vegetation in the same manner as trampling by humans; in areas where off-leash dog use is concentrated, such intensive trampling destroys all vegetation, even the extremely tolerant iceplant. Also, the dune soils at Fort Funston are naturally low in nutrients. Deposition of nutrients via dog urine and feces may alter the nutrient balance in places and contribute to the local dominance of invasive non-native annual grasses that prosper in high-nitrogen soils (e.g., farmer's foxtail (*Hordeum* sp.), wild oats (*Avena* sp.), ripgut brome (*Bromus diandrus*)). Other adverse impacts documented and observed by park staff include off-leash dogs digging and uprooting vegetation.

The proposed closure area will allow for the recovery and expansion of remnant native plant species and communities currently threatened by spread of iceplant, and concentrated visitor and off-leash dog use in the project area. Revegetation efforts will promote the establishment of more than 50 dune plant species, including several rare plant species, such as the San Francisco wallflower and the San Francisco spineflower. Expansion of native coastal dune habitat at Fort Funston is also critical to enhancing the diversity and abundance of locally rare wildlife populations thus making them less vulnerable to extinction. It will also aid in preserving habitat for common wildlife species.

D. Public Safety

Cliff rescues in the Fort Funston area are a serious threat to public safety and have a direct impact on the bank swallow colony. Numerous rescues of dogs and people every year are necessary as a result of falls and/or when those climbing the unstable cliffs find themselves unable to safely move up or down. These rescues can cause injuries to both the rescued and the rescuers, compromising public safety and natural resources at Fort Funston. Additionally, technical rescues, such as cliff rescues at Fort Funston, tie up a large number of park personnel and equipment, leaving major portions of GGNRA unprotected. NPS must take all measures to reduce these preventable emergency rescues to ensure that the limited rescue personnel are available for emergencies throughout the park.

Visitor use at Fort Funston has increased significantly over the past five years, with annual visitation now reaching more than 750,000. Fort Funston has also become the focal point for cliff rescues in San Francisco. An updated review of law enforcement case incident reports indicates the following statistics. Prior to 1998 there was an average of just three cliff rescues per year involving dogs and/or persons stranded on the cliffs at Fort Funston. In 1998 the number of cliff rescues at Fort Funston jumped to 25. In 1999, park rangers performed 16 cliff rescues at Fort Funston.

By contrast, there were a total of 11 cliff rescues in 1998 along the remaining nine miles of San Francisco shoreline from Fort Point to the Cliff House. In 1999, there were four rescues along this stretch of coastline which includes a myriad of hazardous cliffs, and supports an annual visitation of approximately 2 million visitors. There were however, no dog rescues within this region during the past two years, largely because the leash laws are enforced, and because several especially hazardous areas are closed and fenced off for public safety.

There are several factors that have contributed to the increase in cliff rescues at Fort Funston. First, the severe winter storms in 1997/98 significantly eroded the bluffs, creating near-vertical cliff faces adjacent to and below some unauthorized "social" trails along the bluffs and causing more falls over the cliffs. Second, the increasing numbers of off-leash dog walkers at Fort Funston have resulted in many dog rescues, as well as three injured dogs and one dog death from falling off the cliffs at Fort Funston in just the past two years.

The National Park Service has determined that the designated trails (see map) at Fort Funston provide adequate access to the park areas, including ingress and egress to the beach, and that continued use of unauthorized "social" trails within the project footprint is a safety hazard for visitors and park rescue personnel.

The proposed closure will protect visitors, their pets, and the rescue personnel from unnecessary injury and will reduce the costly and time-consuming cliff rescues at Fort Funston by preventing access to dangerous cliff areas, and unauthorized use of "social" trails.

IV. PREVIOUS PROTECTION EFFORTS

GGNRA began pro-active management of the bank swallow colony in 1990, following ranger observations of destructive visitor activities including climbing the cliffs to access nests, carving of graffiti in the soft sandstone, and harassment of birds with rocks and fireworks.

The first dune fences we erected in 1990 at the bluff's edge north of the currently proposed year-round closure to deter visitors from the edge of the bluff. This effort was ineffective. NPS observed increased erosion due to visitor use adjacent to the fenceline. Moreover, the rate of natural bluff erosion, approximately one foot per year, and the constant deposition and erosion of sand material makes the construction of bluff-top fences a short-term solution. To further evaluate the effectiveness and anticipated maintenance needs of a potential fenceline constructed parallel to the bluffs and within 100-150 feet of the bluff edge, GGNRA established sand deposition/erosion monitoring points at selected distances from the bluff top in 2000. The monitoring points were established along a fenceline erected in April 2000. Data gathered at these points was used to make preliminary calculations of the rate of sand deposition/erosion along the northern cliffs at Fort Funston within the currently proposed closure. To date, after 3 months of data collection, data indicates that deposition/erosion of sand varies from +27" to -36" along the monitored fenceline posts, demonstrating the dynamic nature of the habitat and, consequently, the inefficiencies and difficulties of constructing the fenceline close to the bluff edge.

Implementation of an approved bank swallow protection and management strategy began in the fall of 1991, and continued for the next five years. This management strategy included: (1) closing and protecting 23 acres of the bluff tops by installing barrier fencing and removing exotic vegetation above the bank swallow colony; (2) requiring all dogs to be on-leash and all users to be on an authorized, existing trails when travelling through the closed area – all off-trail use was prohibited; and (3) creating a 50-foot seasonal closure at the base of the cliffs where the swallows nest to create a buffer area during breeding season, further protecting bank swallows from human disturbance. GGNRA hang-gliding permit conditions also prohibit flight over the nesting area during breeding season to reduce colony disturbance.

Between 1992 and 1995, over 35,000 native plants were propagated at the Fort Funston nursery and outplanted in the newly restored dunes within the 23-acre closure. This was accomplished through thousands of hours of community volunteer support. This restoration area now supports thriving native coastal dune habitat and several locally-rare native wildlife species including California quail (*Callipepla californica*), burrowing owls (*Athene cunicularia*) and brush rabbits (*Sylvilagus bachmani*), and a diversity of other native wildlife. California quail now survive in only a few isolated patches of habitat within San Francisco and is the subject of a "Save the Quail" campaign by the Golden Gate Audubon Society. Burrowing owls are designated as a state species of concern. California quail are considered a National Audubon Society WatchList species in California because of declining populations. Brush rabbits are not known to occur in any other San Francisco location within GGNRA.

V. PROJECT GOALS AND OBJECTIVES

The National Park Service is proposing to extend the existing 23-acre protection area based upon the following factors:

- southern movement of the bank swallow colony in 1998 to an unprotected area;
- significant decline in the colony size;
- ineffectiveness of a fence installed in 1998 along the bluff top of the unprotected new nesting area – designed to prevent recreational use up and down a landslide on the cliff face;
- ineffectiveness of signs above the new nesting area warning of the sensitivity of the area;
- increase in the total visitation numbers, including off-leash dog walkers;
- increase in the number of cliff rescues staged along the bluff top;
- increase in erosion and loss of vegetation cover within the dunes between the bluff edge and coastal trail from visitor and pet disturbance;
- habitat restoration, including removing tracts of iceplant and restoring with native species.

In order to address the factors listed above, NPS determined that the current proposed closure must meet the following goals and objectives:

1. Provide increased protection to the new nesting location of the bank swallow colony at Fort Funston
 - prevent disturbances from visitor use above and along the bluffs
 - control off-leash dog activities in and above the colony habitat
 - prevent disturbances from cliff rescues

2. Increase biological diversity by restoring native coastal dune scrub habitat
 - reduce invasive exotic species (specifically iceplant) cover to less than 5% and revegetate protected area with native dune species
 - prevent visitor access to unauthorized "social" trail use and prohibit off-trail use
 - reduce impacts of off-leash dog activities within coastal dune scrub habitat
 - reduce disturbances from visitor use within this sensitive coastal dune scrub habitat
 - restore natural dune processes
 - expand native coastal dune habitat at Fort Funston to enhance the diversity and abundance of locally rare wildlife populations, such as California quail
3. Increase public safety
 - reduce risks of falling over cliffs and need for cliff rescues
 - close unauthorized "social" trails along bluff top and close access to back dunes
4. Protect the geologic resources including bluff top and interior dunes from accelerated human-induced erosion.

An interdisciplinary team of GGNRA staff determined the size and footprint of the proposed closure and the design of the protective fence. In considering alternatives, the team evaluated whether the project goals and objectives were met, the ability to achieve compliance within the closure, the long-term maintenance required, the feasibility and costs of construction, and the impacts to recreational uses.

To achieve the goals and objectives listed above, the proposed closure was initially selected by NPS in 1999. However, in January 2000, NPS began implementation of a less restrictive closure that was developed after a series of NPS meetings with representatives of the dog walking community. The less restrictive closure entailed reducing the project footprint and opening over half of the area to visitor access when bank swallows were not present at Fort Funston. Since that time, extensive litigation regarding the closure has resulted in the development of an exhaustive record of evidence that, when re-evaluated, supports the currently proposed permanent closure. NPS has determined that the less restrictive closure is inadequate to meet the mandate of the National Park Service, in light of significant adverse impacts on natural resources, threats to public safety, infeasibility of fence maintenance and difficulty of closure enforcement.

NPS has determined that the currently proposed permanent closure, as depicted on the attached map, is necessary to achieve the goals and objectives outlined above, and is the least restrictive means to protect the resources and preserve public safety at Fort Funston and elsewhere within GGNRA.

VI. PUBLIC INVOLVEMENT

Because of a May 16, 2000, Federal District Court ordered preliminary injunction against the NPS, which disallows the closure until such time as appropriate public notice and opportunity for comment was provided, NPS provided notice of the proposed closure in the Federal Register on July 18, 2000, and invites comments from the public on this proposed year-round closure.

Public comments will be accepted for a period of 60 calendar days from the date of the notice. Therefore, public comments on this notice must be received by September 18, 2000. Comments will be considered and this proposal may be modified accordingly, and the final decision of the NPS will be published in the Federal Register.

If individuals submitting comments request that their name and/or address be withheld from public disclosure, it will be honored to the extent allowable by law. Such requests must be stated prominently at the beginning of the comments. There also may be circumstances wherein the NPS will withhold a respondent's identity as allowable by law. As always, NPS will make available for public inspection all submissions from organizations or businesses and from persons identifying themselves as representatives or officials of organizations and businesses; and, anonymous comments may not be considered.

SEND COMMENTS TO: Superintendent, Golden Gate National Recreation Area, Bay and Franklin Streets, Building 201, Ft. Mason, San Francisco, 94123.

GGNRA ADVISORY COMMISSION MEETING: Comments will also be received at the August 29, 2000, GGNRA Advisory Commission meeting to be held at 7:30 p.m. at park headquarters, building 201, Upper Fort Mason at the intersection of Bay and Franklin Streets, San Francisco, California.

Publications, GGNRA Unpublished Documents and Data, and Personal Communications

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Garrison, Barry. 1988. Population trends and management of the bank swallow On the Sacramento River.

Garrison, Barry. 1991-2. Bank swallow nesting ecology and results of banding efforts on the Sacramento River (annual reports).

Garrison, Barry. Biologist, California State Department of Fish and Game (personal communication 2000).

Golden Gate National Recreation Area Advisory Commission power point presentation on the bank swallow protection and habitat restoration project (January 18, 2000). National Park Service. Unpub.

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